
Substance-Impaired Driving in Motor Vehicle Traffic Crashes in the US

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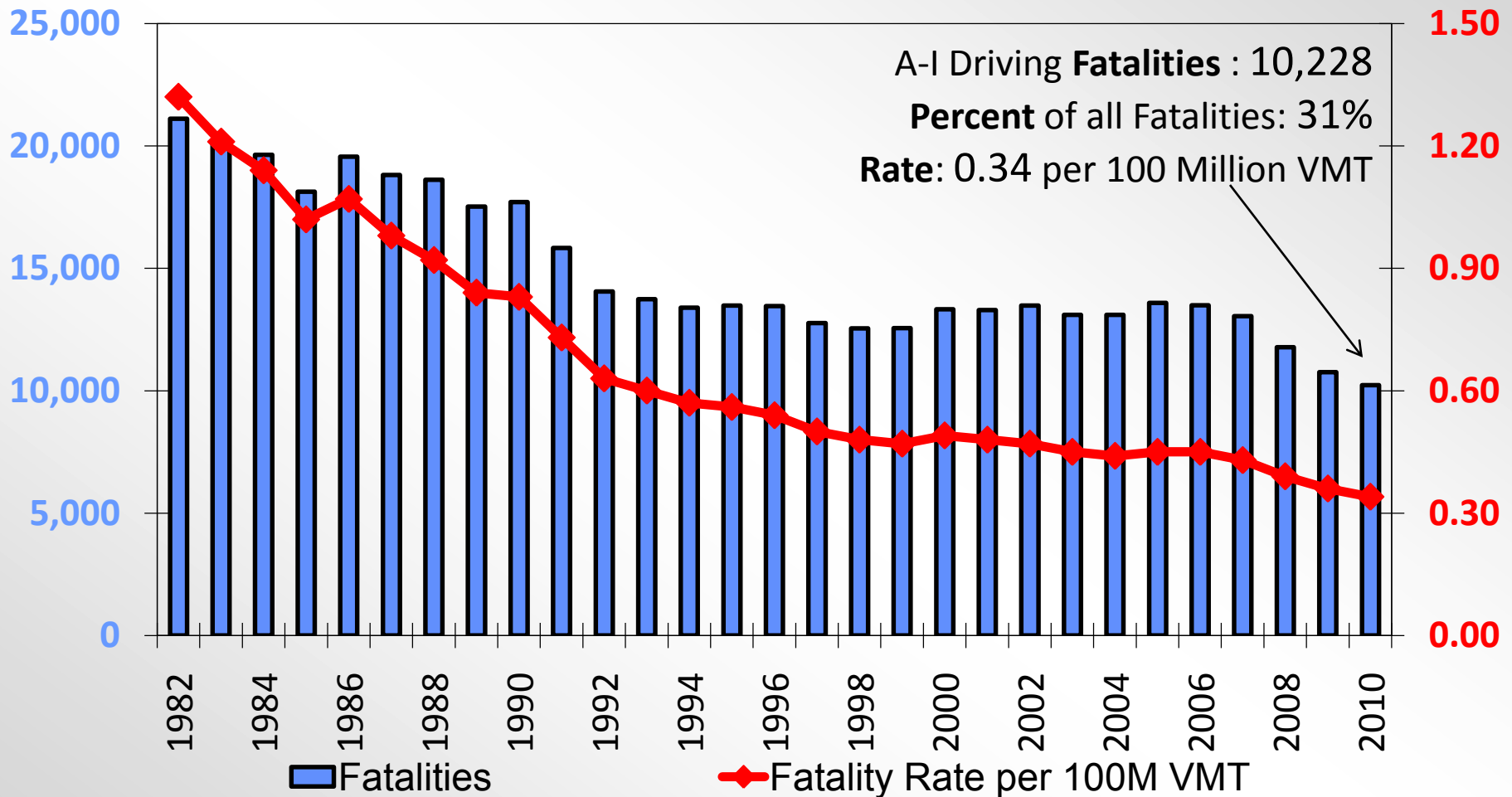
Alcohol Impairment in Traffic Crashes

- Only available for fatal crashes in Fatality Analysis Reporting System (FARS)
- Driver Blood Alcohol Concentration (BAC) level of .08 or above is considered impairment
- Any fatality in a crash involving an impaired driver is considered an alcohol-impaired driving fatality

Drug Involvement in Traffic Crashes

- Only collected and reported for fatal crashes (FARS)
- No levels of impairment
- Presence of up to three drugs
- Challenges with testing protocols and reporting rates

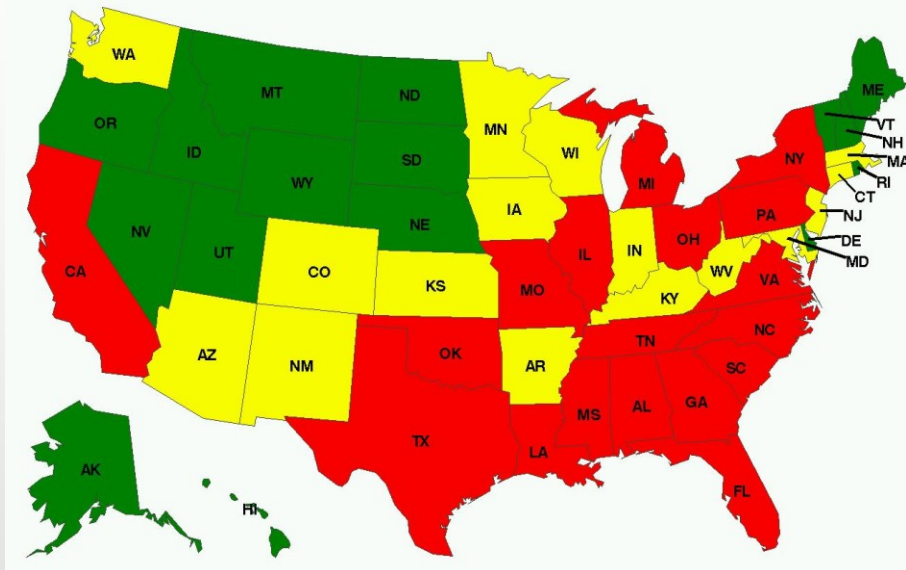
Alcohol-Impaired Driving Fatalities: Number and Rate



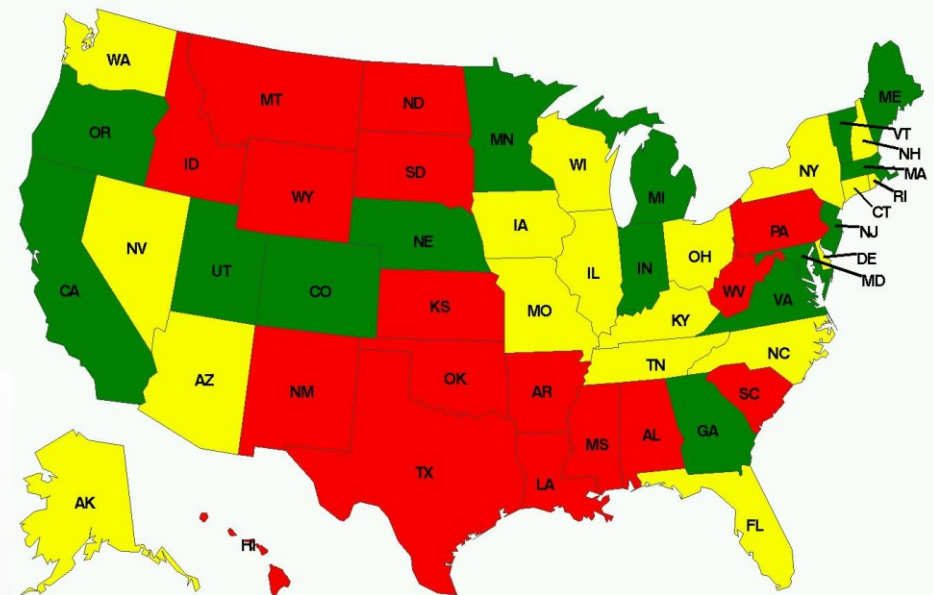
Source: Fatalities: 1982-2010 Fatality Analysis Reporting System (FARS) VMT: FHWA

Scope: Number and Rate of Alcohol-Impaired (AI) Driving Fatalities, by State

Number of AI Fatalities

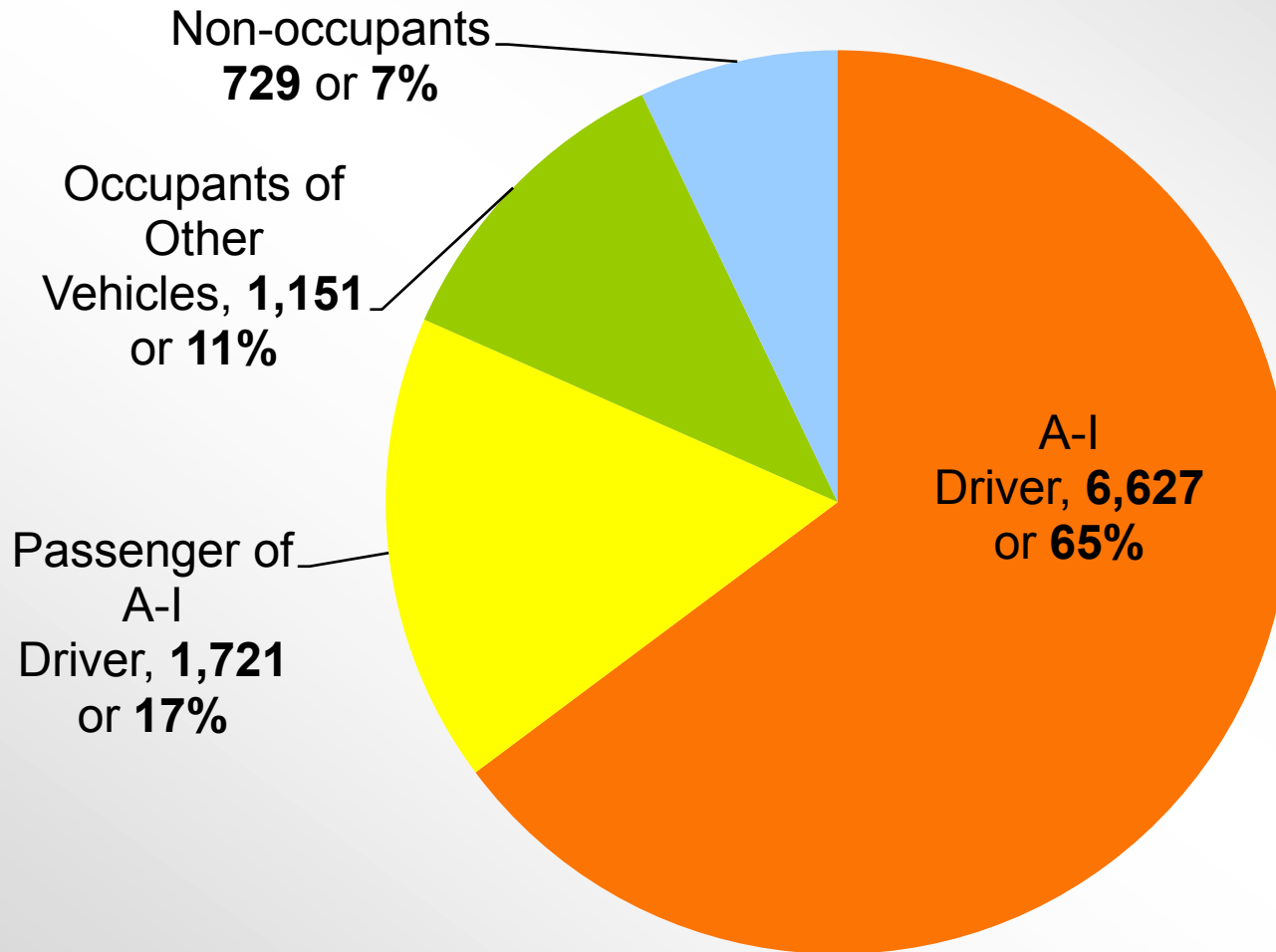


AI Fatality Rate per 100 Million VMT



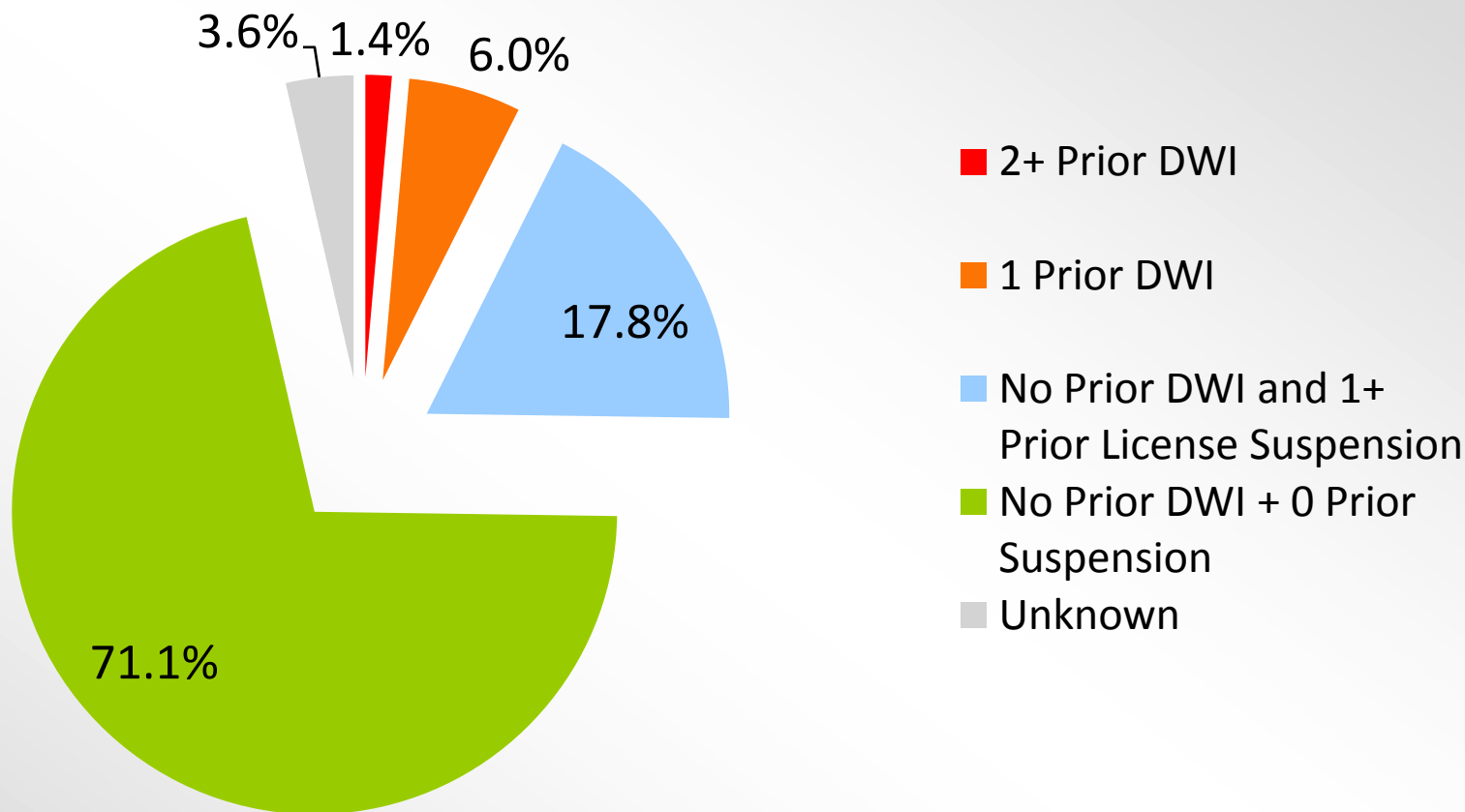
Lower Third Middle Third Upper Third

Alcohol-Impaired Driving Fatalities: By Person Type



Source: 2010 Fatality Analysis Reporting System (FARS)

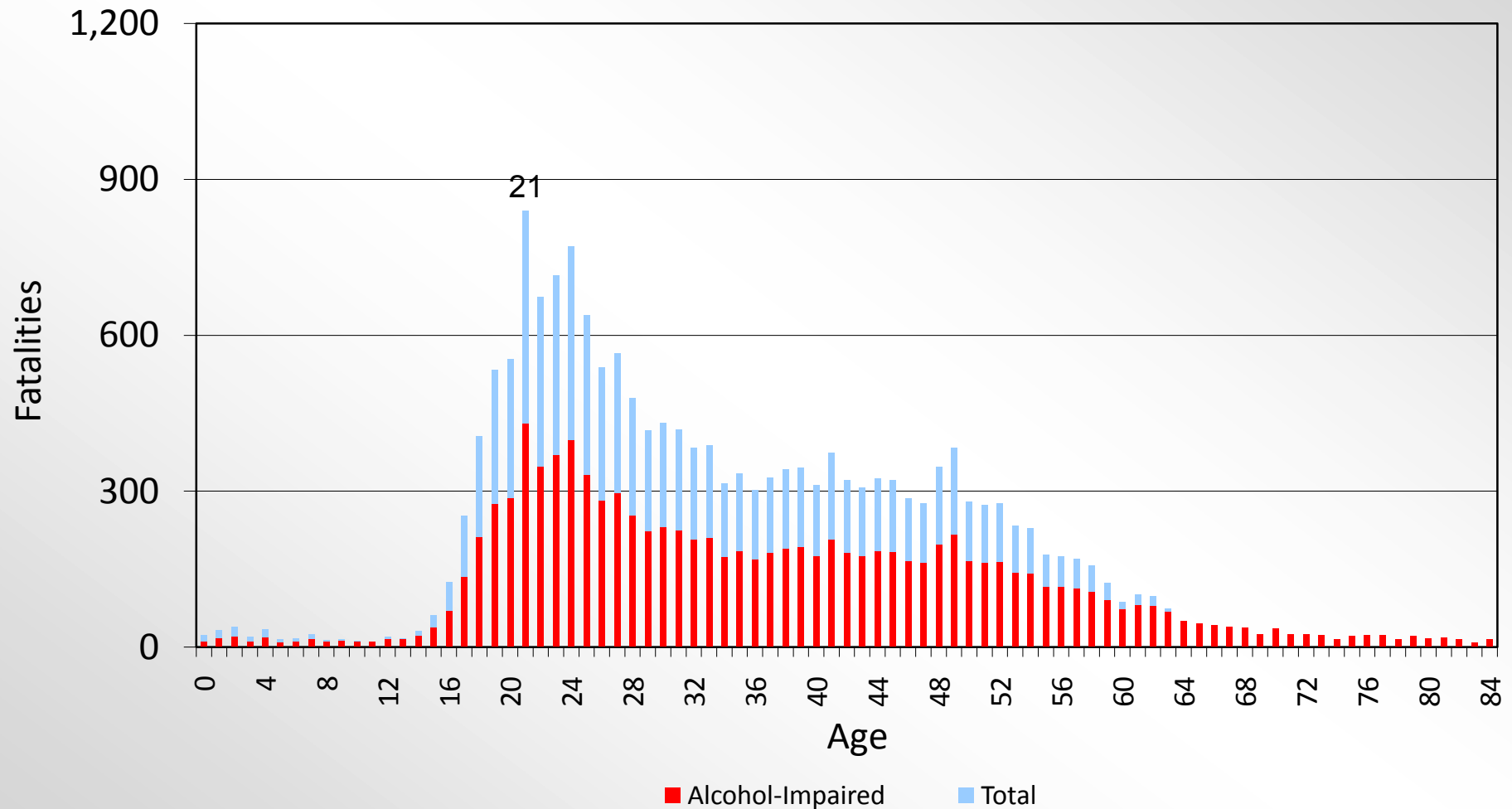
Alcohol-Impaired Drivers in Fatal Crashes: Prior DWI Convictions and License Suspensions*



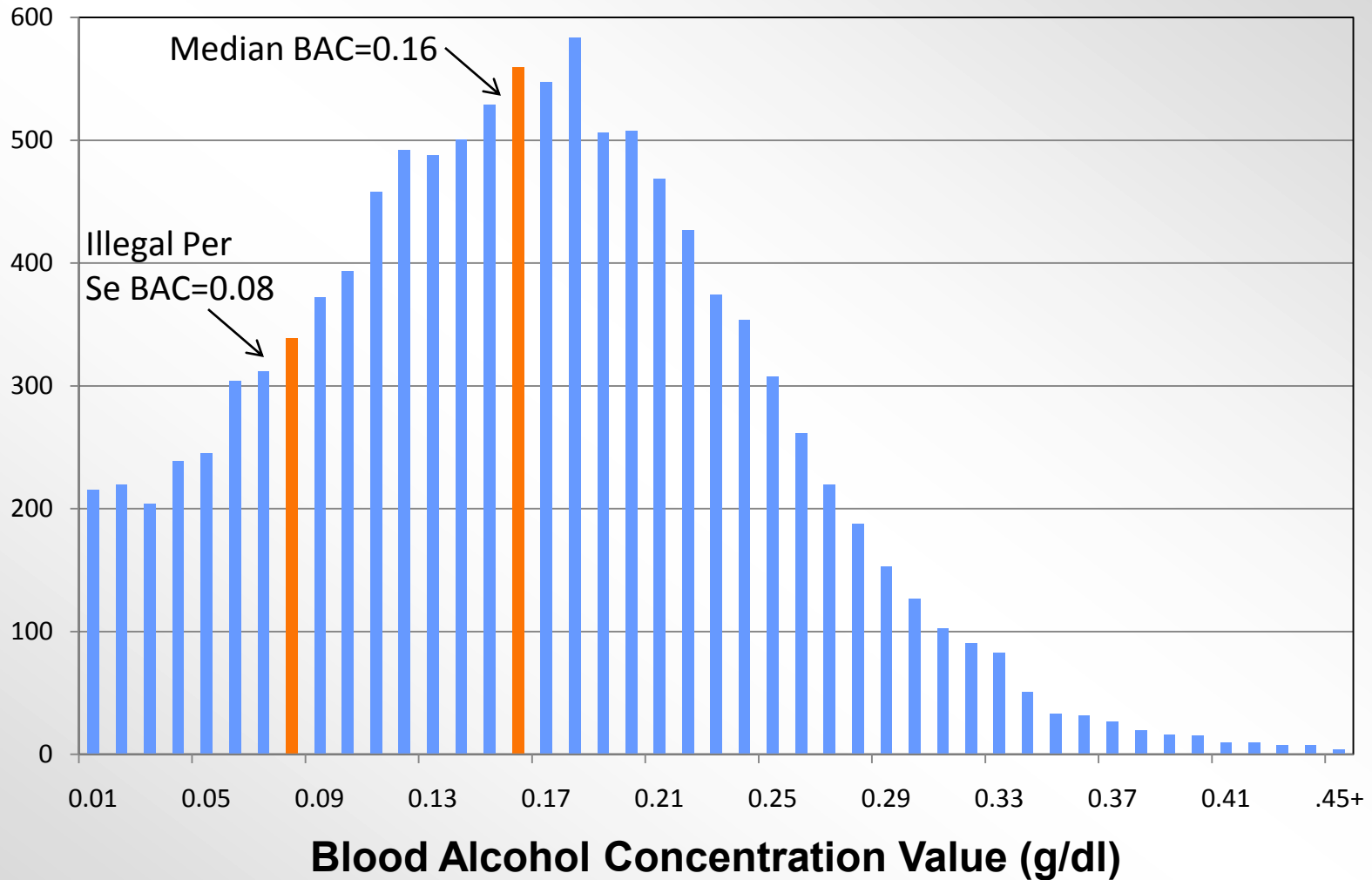
*Within three years from the date of the crash. Source: State Department of Motor Vehicles

Source: 2010 Fatality Analysis Reporting System (FARS)

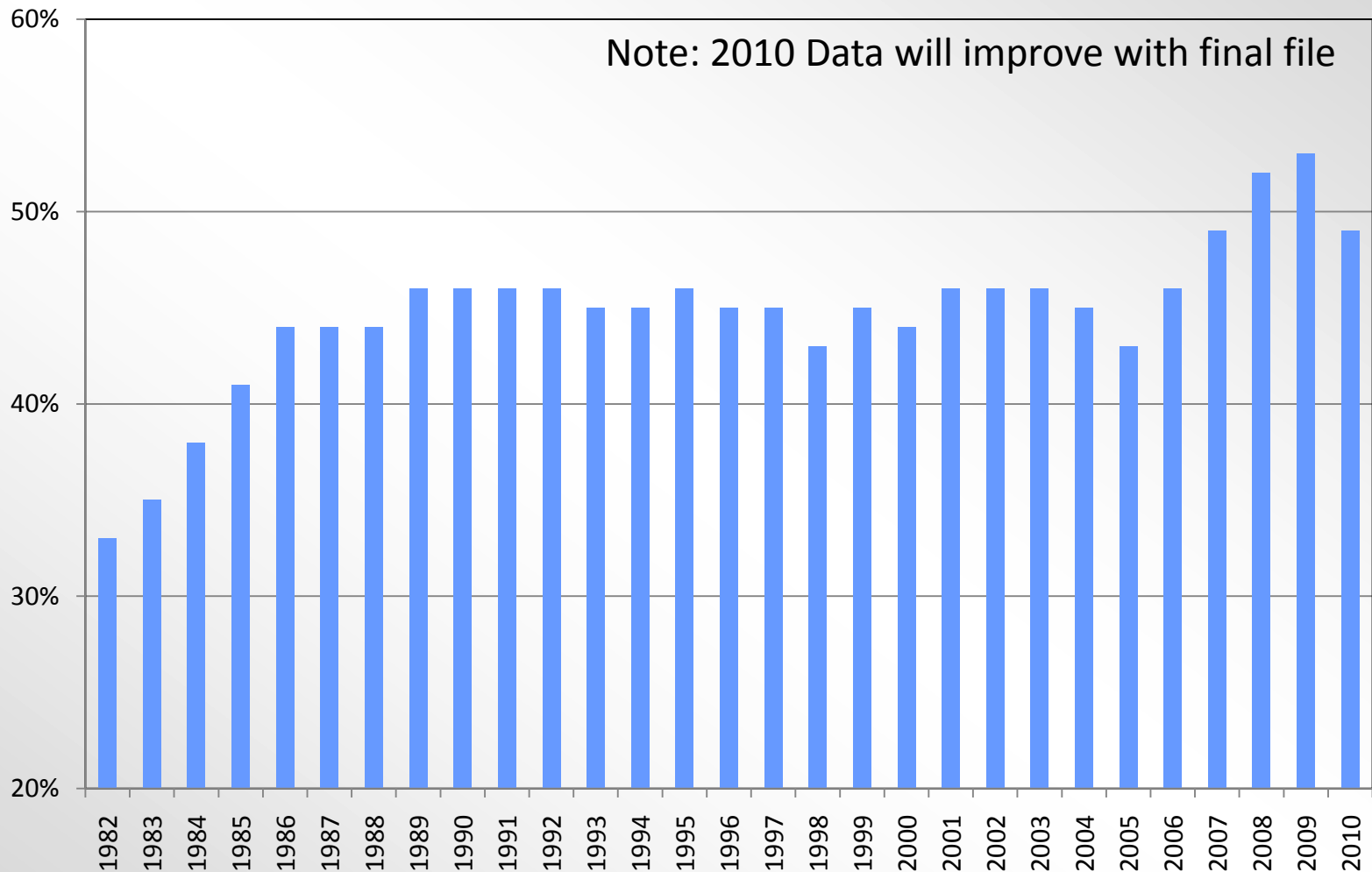
Total Fatalities and Alcohol-Impaired Driving Fatalities by Age



Drivers in Fatal Crashes with BAC>0: By Level of Impairment



BAC Reporting Rates Among Drivers Involved in Fatal Crashes

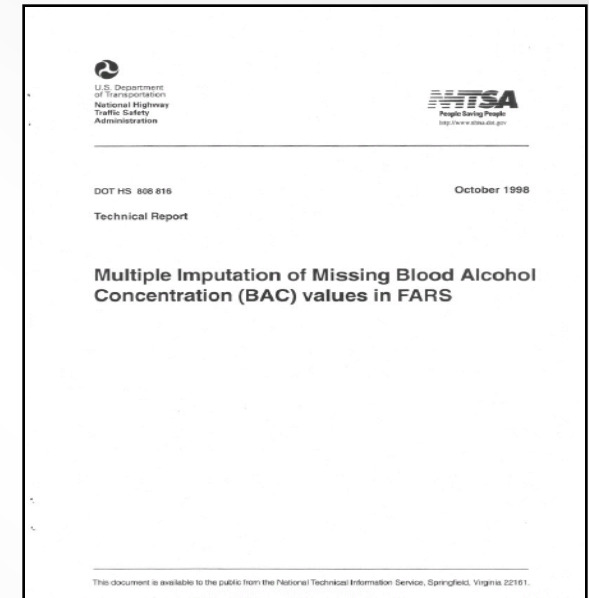


Improving BAC Testing and Reporting

- Training and awareness (Law enforcement, coroners, medical personnel)
- Mandatory testing laws
- Address roadblocks that may discourage testing
- Rigorous tracking of driver until BAC received
- Improved communication between law enforcement, medical facilities and FARS analysts
- Electronic data transfer from labs to FARS

Imputation of Missing BAC Values in FARS

- Peer-reviewed statistical procedure to estimate missing BACs
- Incorporates other available information, including officer's assessment of alcohol involvement
- Reduces bias
- Validated methodology
- National model by vehicle type



Thank you for your attention.

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